What is claimed is:

1. A printing method employing a planographic printing plate material capable of being developed on a printing press, the method comprising the steps of:

imagewise exposing a planographic printing plate material comprising a support, and provided thereon, an image formation layer containing hydrophobic precursor particles;

developing the exposed planographic printing plate material with dampening water and/or printing ink to obtain a printing plate, the dampening water being re-circulated for re-use and filtered with a filter during re-circulation; and

carrying out printing employing the resulting printing plate.

2. The printing method of claim 1, wherein the hydrophobic precursor particles are thermoplastic particles or microcapsules encapsulating oleophilic materials therein.

3. The printing method of claim 1, wherein a filtration accuracy of the filter is not more than the average particle size of the hydrophobic precursor particles.

4. The printing method of claim 1, wherein the filter employs an adsorption ability due to zeta potential, whereby the dampening water is filtered.

5. The printing method of claim 1, wherein the filter employs an ultrafiltration method, whereby the dampening water is filtered.

6. The printing method of claim 1, wherein the imagewise exposing is carried out employing an infrared laser installed in a printing press.

7. The printing method of claim 1, wherein the image formation layer contains the hydrophobic precursor particles in an amount of from 5 to 100% by weight.

8. The method of claim 1, wherein the image formation layer further contains a water soluble resin.

9. The method of claim 8, wherein the water soluble resin is oligosaccharide.

10. The method of claim 9, wherein the oligosaccharide is trehalose.